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Subject: Proposed FY 2009 Forest Health Projects, Pecos/Las Vegas RD

To: Forest Supervisor, Santa Fe National Forest

On October 9, Dave Conklin of our staff met with David Lawrence (SFNF) and Ken Reese (Pecos RD) to examine potential FY 2009 Forest Health project areas on the Pecos/Las Vegas District. These areas are located on Johnson Mesa, within the Gallinas Municipal Watershed WUI project area west of Las Vegas.

### **East Unit (114 acres)**

This area is dense mixed conifer forest, with stand structure and species composition varying with aspect and slope. Ponderosa pine, white pine, Douglas-fir, and white fir are each well-represented throughout most of the area. Roughly half this area had been selectively harvested in the early to mid 1970s, although the existing understory was not thinned at that time (or since). It appears that the remainder of the area has never been entered. Basal areas typically range from 100 to 150 ft<sup>2</sup> per acre, with densities of 500 to 1000+ trees per acre.

Scattered bark beetle activity has occurred the past several years. Ponderosa pine dwarf mistletoe has a typical patchy distribution and is present in roughly 1/3 of the total area. Douglas fir mistletoe, although also common, appeared to be somewhat less abundant.

It appears that most of this area could be treated effectively under a single prescription. Treatment would primarily be a thinning from below (favoring the better dominant and codominant trees) to reduce ladder fuels and open up the canopy to about 40% cover. However, 10 to perhaps 15 acres in the NW portion of this unit are rather unique, and clearly warrant a different prescription. Here, a nearly pure ponderosa pine overstory of 200+ year old trees overtops a 30-40 year-old understory of mostly white pine. In this particular area, we highly recommend retaining a good proportion of the better understory white pines, which would otherwise be cut in a typical fuels-reduction (low-thinning) prescription.

### **West Unit (99 acres)**

This entire area has a northerly aspect, and so is more mesic (wetter) overall than the East Unit. Douglas fir and white fir are the predominant species, with minor amounts of white pine (an estimated 3-4% of stems) and ponderosa pine (1% of stems). The last entry was a light selective harvest in the early to mid 1970s. Basal areas generally range from 120 to 160 ft<sup>2</sup> per acre.



Douglas-fir dwarf mistletoe is extensive in the upper portion of the unit, but generally tapers off down the slope. This disease, in combination with the Douglas-fir bark beetle, was associated with several sizable pockets of recent tree mortality. Lesser amounts of white fir mortality were observed, most likely a result of fir engraver beetle and possibly root disease. The understory has experienced moderate spruce budworm damage in recent years, although the overstory has sustained relatively little damage from this defoliator.

The prescription here would also be designed to achieve 40% canopy closure, and likely be similar to that used for the East Unit. However, compared to the East Unit, it appeared that this would require cutting more relatively large (i.e. 9" to 16+ inch dbh) trees.

## **Conclusions**

Although treatment of these areas is primarily intended to reduce fire severity (as per Gallinas EA), it would also improve tree growth and vigor, reducing bark beetle susceptibility. It is anticipated that basal areas would be reduced to 80 ft<sup>2</sup> or less in most areas. Prescriptions should also reduce dwarf mistletoe infection in these stands. Within mistletoe-infested areas, favoring non-host species can be used to advantage. Throughout both Units, we recommend that white pine, where present, be the preferred species for retention.

An old (unmaintained) road system potentially provides access within portions of both of these Units. It would seem highly advantageous to re-open these roads, not only to facilitate project implementation, but to allow access for gathering firewood and other products. Removing much of the cut material ("heavies") seems especially important for achieving fuels reduction objectives. Efficacious treatment of the West Unit would likely necessitate removal of significant numbers of sawtimber-size trees.

Please contact Dave Conklin at (505) 842-3288, if you have questions about this evaluation.

*/s/ David A. Conklin (for)*

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